IN THE SPECIFICATION

Please replace the paragraph at page 1, lines 7-8, with the following rewritten paragraph:

The present invention is related to optical signal receiving ~~equipment~~ equipments having an error correction function.

Please replace the paragraph at page 7, lines 12-19, with the following rewritten paragraph:

The serial-parallel converting circuit 14 converts ~~into parallel data~~ series binary-coded data ~~that has been~~ inputted from the decision result encoder 13 into parallel data, so as to slow down the data rate, and outputs the data to the error correction circuit 15. The reason why the data rate is slowed down is that the processing speed of the error correction circuit 15 can be made slow. In addition, there may be a case in which the serial-parallel converting circuit 14 need not be used, depending on a relationship between the transmission rate and the processing capability of the error correction circuit 15.

Please replace the paragraph beginning at page 22, line 22, to page 23, line 7, with the following rewritten paragraph:

Fig. 15 is a flowchart explaining a method of searching for the μ0. At first, [[an]] a decider for measuring amplitude is selected (step ST11). Because the equipment has not yet in operation when the equipment is started, any of the deciders 12a through 12g and the sweep decider 41 may be used. Because the deciders 12a through 12g are used for soft decision-identification during the operation, only the sweep decider 41 can be used for identifying the μ0. Next, the threshold level in the selected decider is set at an initial threshold level for searching for the μ0 (step ST12). Although the initial threshold level can

be set at any arbitrary value, it is preferable that the level is set at a middle value between the "0" levels of the maximum and minimum input amplitudes.

Please replace the paragraph at page 24, lines 8-24, with the following rewritten paragraph:

Fig. 17 is a flowchart explaining the operation of searching for the μ1. Similarly to the case in Fig. 15, [[an]] a decider for measuring the amplitude is selected (step ST21), and an initial threshold level for searching for the μ1 is set (step ST22). Next, counts of identification 0 and identification 1 for a predefined time are added up, and the ratio of the identification 0 to the identification 1 is calculated (step ST23). When the ratio of the identification 0 to the identification 1 is smaller than 3/1 ("Yes" flow of step ST24), the threshold levels are shifted towards "1" side (right side) (step ST25) and the step recurs to the step ST23, because the threshold levels are in the 0 side (left side) with respect to the peak of the curve f1(r) illustrated in Fig. 16. On the contrary, when the ratio of the identification 0 to the identification 1 is greater than 3/1 ("Yes" flow of step ST26), the threshold levels are shifted to "0" side (left side) (step ST27) and the step recurs to the step ST23, because the threshold levels are in the 1 side (right side) with respect to the peak of the curve f1(r) illustrated in Fig. 14. Then, the steps are repeated until the ratio of the identification 0 to the identification 1 is equal to 3/1 ("No" flow of step ST26).

Please replace the paragraph at page 28, lines 6-21, with the following rewritten paragraph:

A block diagram according to Embodiment 6 of the invention is the same as the diagram illustrated in Fig. 12. Here, Fig. 19 is a flowchart for correcting, in the threshold control circuit 17 illustrated in Fig. 12, the deterioration over time of the threshold levels of

the deciders 12a through 12g. At first, searches for the identification results (the counts of the identification 0 and the identification 1) using the threshold levels, set at the start of the equipment, of the deciders 12a through 12g, and the threshold level, of the sweep decider 41, that makes both the identification results the same are conducted, and the results thereof are recorded (step ST31). Next, after a predefined time, the identification results by the deciders 12a through 12g each are compared with the recorded identification results of the sweep decider 41 corresponding to each of the threshold levels; if there is [[an]] a decider in which both results do not agree with each other ("No" flow of step ST32), the threshold level in the decider is corrected (step ST33), and the process recurs to the step ST32. Then, these processes are repeated until all identification results become identical ("Yes" flow of step ST32).

Please cancel the original Abstract at page 36, lines 1-15 in its entirety, and insert therefor the following replacement Abstract on a separate sheet as follows: